



Food Tracker Calories Application

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Abstract: Food tracker and calories application is a smart phone app that helps users to regulate their diet by self-monitoring. In food tracker calories application the user can monitor their calories by giving height, weight, country, gender, age and job. The program will update the user by giving the result according to the calories. The application will display a message that the user is normal, overweight or underweight with weight diagram, diet, doctor recommendation and notifications.

I. INTRODUCTION

Tracking your diet is the first step to getting control over it, and just the act of writing down what you eat can have huge benefits. More than a few studies have shown that people who actually keep track of what they eat on paper, in an app, or in some other record, have better success at losing weight, managing their diet, controlling their portions, and sticking to healthy habits.

Diet and exercise are only part of the equation when it comes to eating healthier and losing weight. The rest is in your head, and for many people, that's where the real battle is won or lost. To keep your head in the right place, consider keeping a food diary, or a regular log of what you've eaten and when. We don't mean counting calories either (although that can be helpful too.) The simple act of recording your meals forces you to think about what you ate, when you ate it, and how large your portions were.

Tracking calories in and calories out is one of the most basic ways to keep yourself in check if you are trying to lose weight. A balance diet is one that gives your body the nutrition it needs to function properly. You should obtain the majority of your daily calories from fresh fruits and vegetables, whole grains and lean proteins. Eating the right kind of food is a must for every health conscious person. The number of calories in a meal is a measure of the amount of energy stored in that food. Our body uses calories from food, walking, thinking, breathing and everything else it does. The average person needs to eat about 2000 calories every day to maintain his/her weight. A person's daily calories intake should be based on age, gender and physical activity level.

Our application is a smart phone app that helps users to regulate their diet by self-monitoring. People can count their calories by entering their information like height, weight, country, gender, age and job. It also helps user to check diet and workout according to their age and weight.

Our application gives information for over-weight, obese and also helps to manage the weight. According to the weight it gives the information of the doctor available in the country.

You don't even need a pencil and paper - your smart phone can do the work for you.

Our application maintains the database of images of exercise according to their weight and calories. It contains information of food of low calories. The most important part our database is it have the information of doctors of different countries with different cities. Information like name phone address of the clinic or hospital.

II. EXISTING SYSTEM

The current system does not allow the user to know the number of calories that needs to lose. There is nothing premium, no diet, no doctors and no extra reports to track the calories.

III. PROPOSED SYSTEM

Food tracker calories application helps you set a daily *calorie* budget; track your food and exercise. If the user is obese, according to the country doctor will provide expert content along with genuine caring.

IV. FEATURES OF SYSTEM

The computer implementation of food tracker and calories application has many features compare to the manual way. The app has been made user friendly with proper use of java software. The user can track the calories as many times they need.

- ✓ Users can access from home page.
- ✓ To check the calories, the user have to give basic information like height, weight, country, gender, age and job.
- ✓ It will calculate the calories and check whether it is over and under weight.
- ✓ It will direct to the next page or interface according to weight and recommend the exercise and doctor.
- ✓ Track our weight, measurements and more for motivation.

- ✓ Saving time.
- ✓ Very fast and easy to use.
- ✓ It is free to use.
- ✓ User have ever keep track of his weight loss

V. RELATED WORK

We study several research papers and websites on calorie counts with different platforms and summarize the finding below.

Calorie counter is a help app to maintain body calories [1]. Researchers have used different and different platforms to make different application which give good results to help in losing weight.

Many software implementation of calorie counters which are recently available on different platforms like ios, android, and windows have only calorie count and give information of nutrition recipes.

Traditionally to keep information of calories, we have to concerned dieticians or nutritionist who used to calculate the calories and prescribe the diet. And they have to follow the doctor for every 15 days. Then they have implemented website for desktop, which calculate the calories. Now recent apps are handheld app which are also known as mobile app or smart phone app.

My Fitness Pal: Calorie Counter and Diet Tracker. This app keep track on calories by just entering some basic information and your goals and the app will estimate the amount of calories you should take in each day. This app also have nutrition information (Platform like IOS, Android, and Blackberry) [1]

Lose it: This app is very simple and quick compared to other app. It allows to save meals and recopies in the food log by barcode scanner, which allow to add new food. It is also have a calorie recorder. This app will tell you if you are over or under your limit (Platform like IOS, Android) [3]

Spark People: Calorie Counter app gives you to access hundreds of exercise, demos, and articles by health and wellness experts, healthy recipes. It is a calorie counter with food entities with the barcode scanner (Platform like iPhone and Android) [4]

Fooducate: The Fooducate dashboard is as colorfully attractive as it is informative. Foods are rated through a grading system (A, B, C, D) based on nutritional contents and quality of ingredients. It also gives favorite meals and snacks (Platform like iPhone and Android) [7]

MyNetDiary is a weight loss mobile app have food database and food tracker which helps in when to take more food and eat less .It also have daily and weekly analysis and estimate how much you are losing on each day .It has Recommendation by doctor what to eat(Platform iPhone/iPad, Android Phone and Tablet, Blackberry and iPod) [8]

Diet point is another app that puts most of the power in your hands. It contains more than 130 diet plans complete with dedicated shopping list, tips to improve your weight loss plan. And it will even remind you when it is time for you to eat again [9]

VI. SYSTEM REQUIREMENTS

- a) Windows vista / win-7 Operating System.
- b) Front end: SDK JAVA (Eclipse Juno), Arduino 2.2, Foryo up to Jelly Bean 4.2.1.
- c) Database: SQLite Database.
- d) Computer system with core-i3 processor.

VII. SYSTEM DESIGN

The Use Case diagram for Food tracker Calories Application.

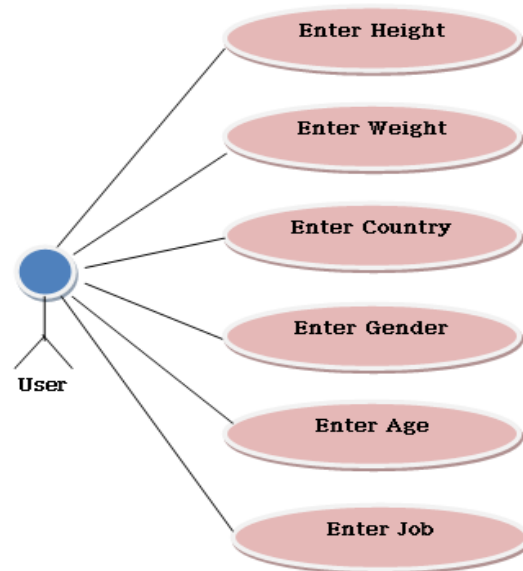


Fig 1: Use Case diagram for Food Tracker Calories Application

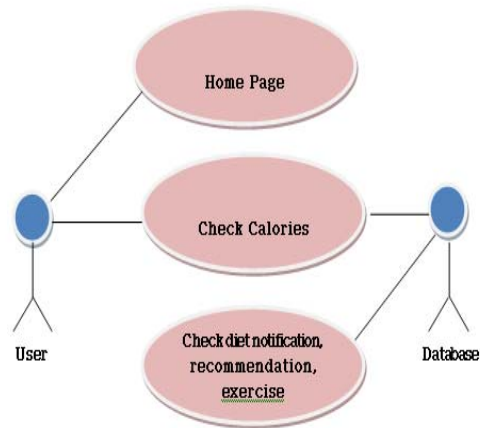


Fig 2: Check Calories

The Flow Chart of Food Tracker Calories Application use in present system is shown in Fig 3.

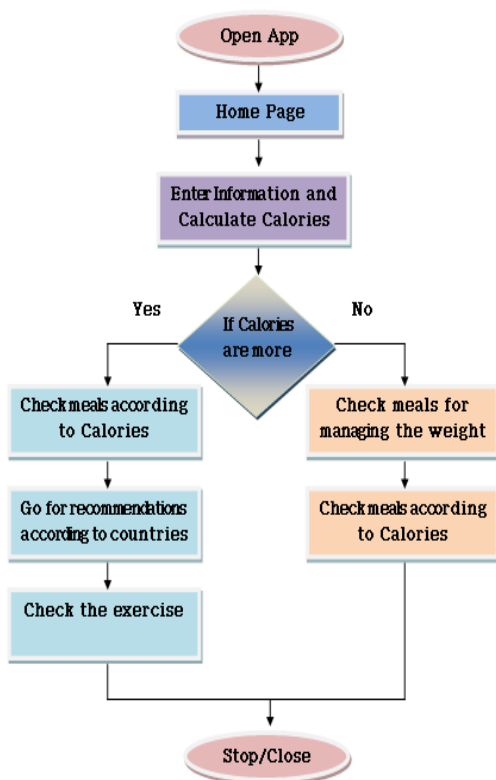


Fig 3: Food Tracker Calories Application Flow Chart

VIII. SYSTEM IMPLEMENTATION

Software implementation is the stage in the software engineering process at which an executable software system is developed. In this stage where the theoretical design is turned into a working system.

After having the user acceptance of the new system developed, the implementation phase begins. Implementation is the stage of a project during which theory is turned into practice. During this phase, all the programs of the system are loaded onto the user's computer. After loading the system, training for the users starts. Main topics of such type of training are:

- ✓ How to execute the package
- ✓ How to enter the data
- ✓ How to process the data (processing details)
- ✓ How to take out the reports

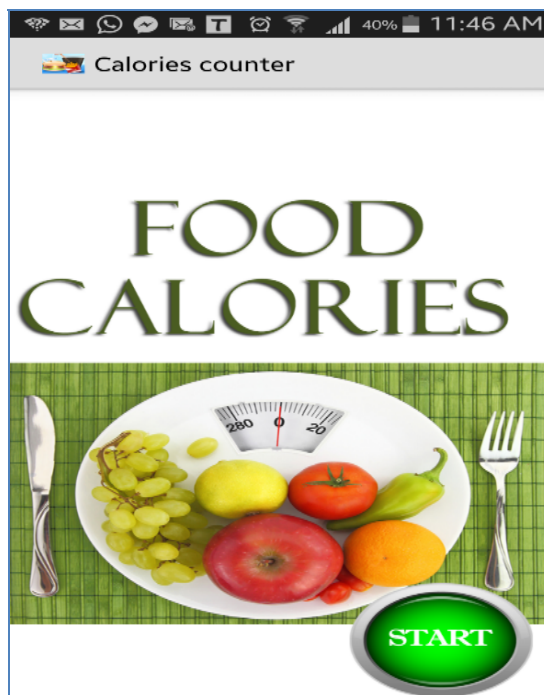
After the users are trained about the computerized system, manual working has to shift from manual to computerized working. The following two strategies are followed for running the system:

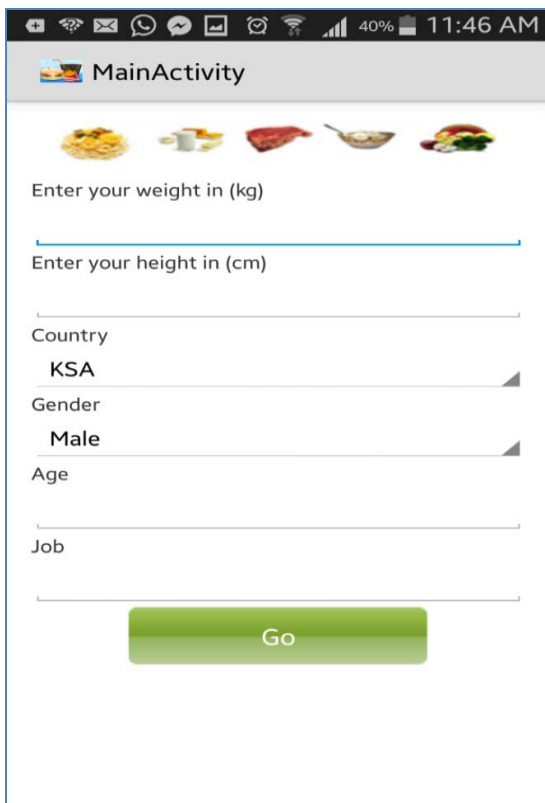
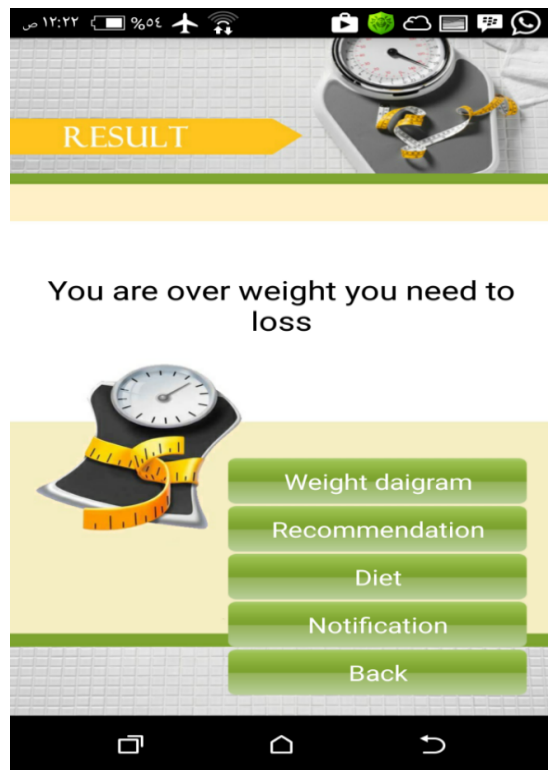
Parallel running is one of the ways to change from an existing system to a new one i.e. computerized and manual are executed in parallel. This strategy is helpful because of the following:

- Manual results can be compared with the results of the computerized system.
- Failure of the computerized system at the early stage, does not affect the working of the organization, because the manual system continues to work, as it used to do.

In Pilot run, the new system is installed in parts. Some part of the new system is installed first and executed successfully for considerable time period. When the results are found satisfactory then only other parts are implemented. This strategy builds the confidence and the errors are traced easily.

HOW TO USE FOOD TRACKERS APPLICATION





DailyActivity

DAILY CALORIE NEEDS

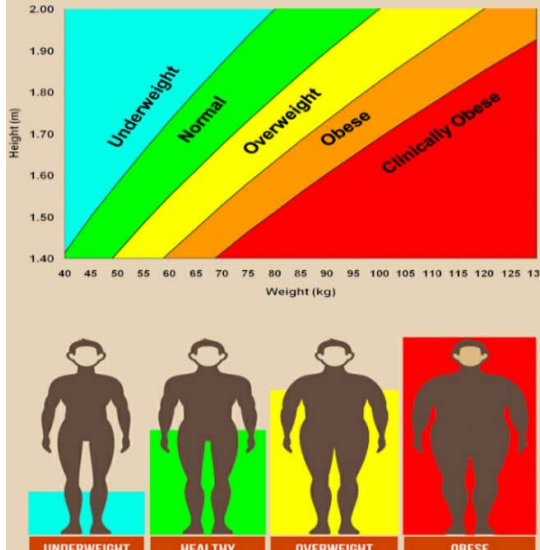


Age (Years)	Gender	Sedentary (Not Active)	Moderately Active	Active
2-3	Male or female	1,000	1,000	1,000
4-8	Male	1,200 – 1,400	1,400 – 1,600	1,600 – 2,000
	Female	1,200 – 1,400	1,400 – 1,600	1,400 – 1,800
9-13	Male	1,600 – 2,000	1,800 – 2,200	2,000 – 2,600
	Female	1,400 – 1,600	1,600 – 2,000	1,800 – 2,200
14-18	Male	2,000 – 2,400	2,400 – 2,800	2,800 – 3,200
	Female	1,800	2,000	2,400
19-30	Male	2,400 – 2,600	2,600 – 2,800	3,000
	Female	1,800 – 2,000	2,000 – 2,200	2,400
31-50	Male	2,200 – 2,400	2,400 – 2,600	2,800 – 3,000
	Female	1,800	2,000	2,200
51 and older	Male	2,000 – 2,200	2,200 – 2,400	2,400 – 2,800
	Female	1,600	1,800	2,000 – 2,200

Main screen Eatwell plate

DiagramActivity


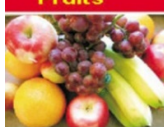


WEIGHT DIAGRAM



MAIN SCREEN

Caloretable1Activity

CALORIES TABLE

Snacks	Name	Quantity	Calories
	Burger	1 pcs	325
	Pizza	1 portion	375
	Samosa/Kachori	1 pcs	256
	Pakoda	1 pcs	200
	Potato Chips	10 pcs	110
	Dahi Wada	1 pcs	364
French Fries	10 pcs	235	
Fruits	Name	Quantity	Calories
	Apple	100 gms	56
	Banana	100 gms	95
	Mangoes	100 gms	70
	Orange	100 gms	53
	Chikoo	100 gms	94
	Papaya	100 gms	32
	Peach	100 gms	50
Vegetables	Name	Quantity	Calories
	Potato	100 gms	97
	Peas	100 gms	93
	Cauliflower	100 gms	30
	Cabbage	100 gms	45
	Carrot	100 gms	48
	Mushroom	100 gms	18
Onion	100 gms	50	
Milk & Milk Pdts	Name	Quantity	Calories
	Milk	1 cup	100
	Skimmed Milk	1 cup	45
	Curd	1 cup	60
	Butter	1 tbsp	120
	Cheese	1 cup	164
	Ice-Cream	1 scoop	114
	Ghee	100 gms	910

Main screen Next

IX. SYSTEM TESTING

Testing is a process, which reveals errors in the program. Once the source code has been generated, the software must be tested to uncover as many errors as possible before deliver to the customer.

Testing Objectives

- ✓ Testing is a process of executing a program with the intent of finding an error
- ✓ A good test case is one that has a probability of finding an as yet undiscovered error
- ✓ A successful test is one that uncovers an undiscovered error

Testing Principles

- ✓ All tests should be traceable to end user requirements
- ✓ Tests should be planned long before testing begins
- ✓ Testing should begin on a small scale and progress towards testing in large.
- ✓ Exhaustive testing is not possible
- ✓ To be most effective testing should be conducted by an independent third party

The primary objective for test case design is to derive a set of tests that has the highest likelihood for uncovering defects in software.

Test Cases

- ✓ Test cases are derived to ensure that all statements in the program have been executed at least once during testing and that all logical conditions have been executed.
- ✓ Using White-Box testing methods, the software engineer can drive test cases that
- ✓ Guarantee that logical decisions on their true and false sides.
- ✓ Exercise all logical decisions on their true and false sides.
- ✓ Execute all loops at their boundaries and within their operational bounds.
- ✓ Exercise internal data structure to assure their validity.

X. CONCLUSIONS

We develop and implement food tracker calories application that helps users to regulate their diet by self-monitoring. We use Windows vista / win-7 Operating System, Microsoft Office Package, SDK JAVA (Eclipse Juno), Arduino 2.2, Foryo upto Jelly Bean 4.2.1. This app gives you full mobile access to the account, so you can log your food from anywhere, at any time. We designed our screen, button, every detailed based on goal and rules in design. Overall application is well made, works without any bugs and is able to use

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- [1] <https://www.myfitnesspal.com/account/logout>
- [2] <http://www.builtlean.com/2013/09/19/myfitnesspal-review/>
- [3] <http://www.goodhousekeeping.com/electronics/smart-phone-reviews/a19334/free-diet-apps/>
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